

PENTARCH PETROLEUM

25938 GARDNER STREET, LOMA LINDA, CA 92354

PHONE: 909.440.9158

FAX: 909.796.5121

Email: stephenfilippi@roadrunner.com

RECEIVED

JUN 05 2015

RWQCB-CV
FRESNO, CALIF

June 3, 2015

Ronald Holcomb
Central Valley Water Board
1685 E Street
Fresno, CA 93706

Subject: Technical Report—California Water Code Directive

Ron,

Enclosed is the Technical Report required by California Water Code Section 13267. This report includes the hardcopy of all water analysis done by Zalco Laboratories. The electronic copy was sent to Doug Patteson at doug.patteson@waterboards.ca.gov. The sample was collected by a Zalco representative at the waste water tank which feeds directly into sump #1. This sump (pond) is the upstream sump connected in a series to the other 3 sumps without any other source of inflow. As noted in the case narrative from Zalco a portion of this waste water is used by us (Filippi family) for irrigating approximately 20 acres of farm land which is in the boundary of the Pentarch Petroleum lease. This practice started in approximately 2012 with verbal approval from the Water Board.

The following items are included: 1) plot plan which indicates the Pentarch Petroleum lease showing the approx. location of the tank farm and sumps as well as lease parcel numbers at the bottom of the page. 2) an aerial view of the Pentarch Petroleum lease boundaries with the LAT and LONG coordinates, along with another view of the tank farm and sumps. 3) an aerial view of the sumps (ponds) along with the location of the waste water tank. I have included the waste water tank in this report because this tank captures the residual oil that would normally be sent out to the sumps and returns it to the tank facility for processing. Included in this aerial are the numbered sumps, the dimensions (L x W x D), the duration of discharge, and the volume of waste water per year. 4) the signed Certification Statement to the Central Water Board.

If you have any questions please do not hesitate to call or email me at the information provided above.

Thanks

Stephen Filippi

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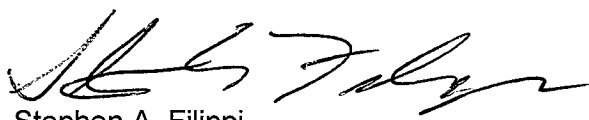
Email: stephenfilippi@roadrunner.com

June 3, 2015

Ronald Holcomb
Central Valley Water Board
1685 E Street
Fresno, CA 93706

Subject: Certification Statement—California Water Code Directive

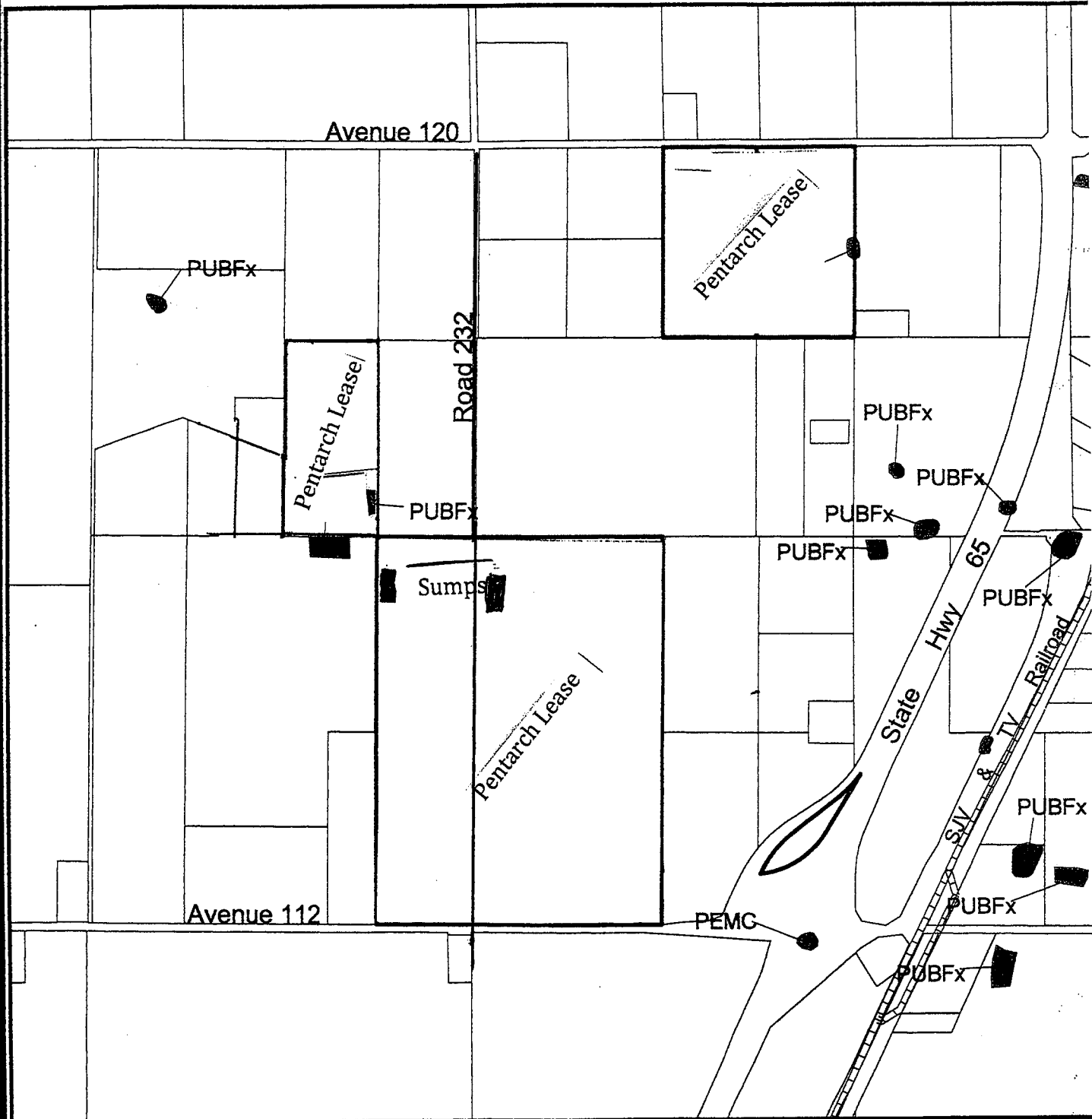
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system , or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Stephen A. Filippi
Pentarch Petroleum



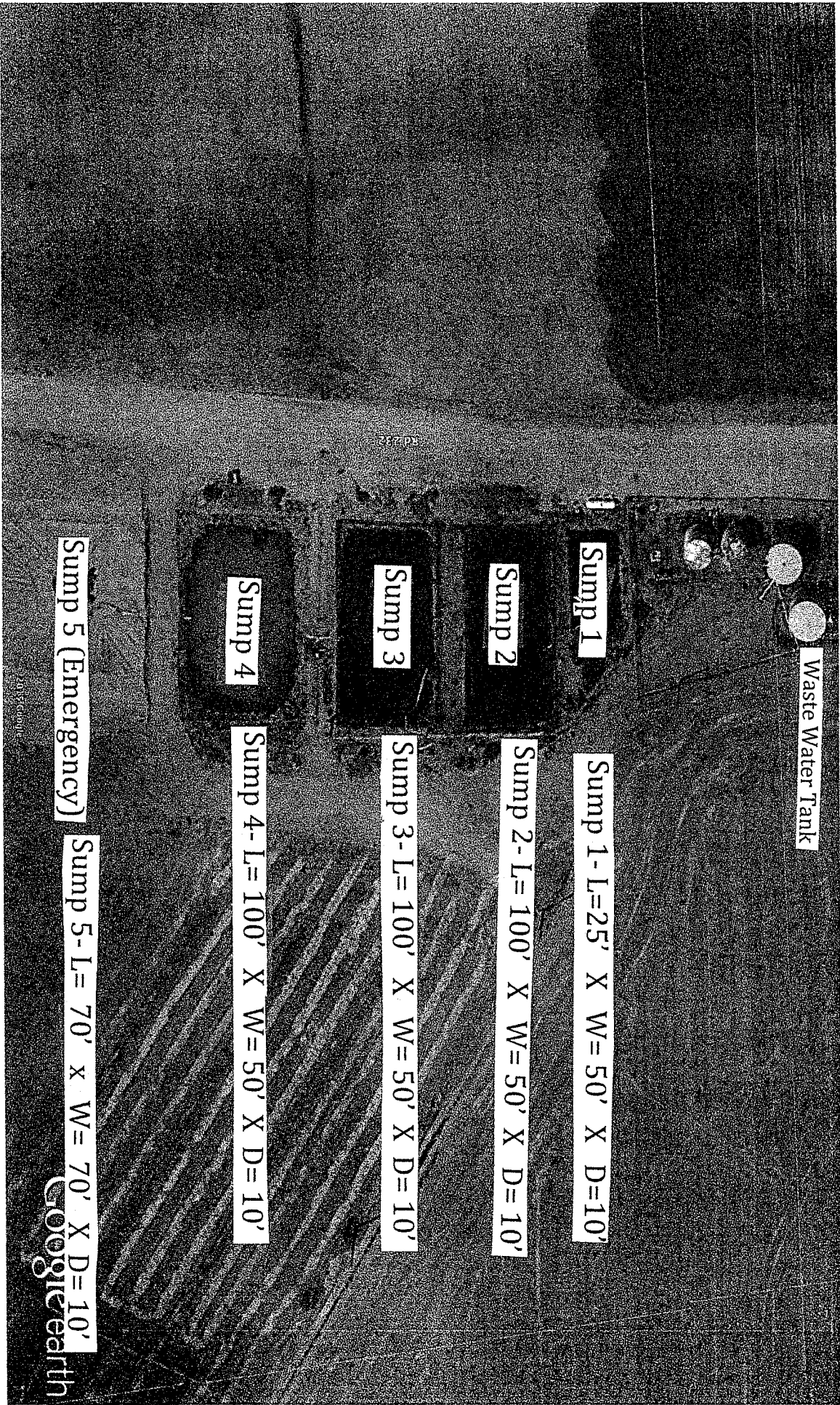
PENTARCH PETROLEUM LEASE



500 0 500 1000 1500 2000 Feet

Parcel # - 302350005, 302350006, 302360001, 302360002,
302360003, 302360004, 302360007, 302370009
302370010, 302380008





Waste Water Tank

Sump 1

Sump 1 - L=25' X W=50' X D=10'

Sump 2

Sump 2 - L= 100' X W=50' X D= 10'

Sump 3

Sump 3 - L= 100' X W= 50' X D= 10'

Sump 4

Sump 4 - L= 100' X W= 50' X D= 10'

Sump 5 (Emergency)

Sump 5 - L= 70' x W= 70' X D= 10'

Google earth

feet
meters



Duration of Discharge - 12 months/year

Volume of Wastewater- +/- 1,200,000 Bbl/year





Google earth

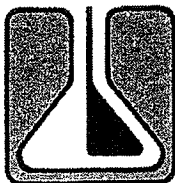
feet
km



PENTARCH PETROLEUM LEASE BOUNDARIES

LAT= N 35 59' 47.04" | LONG= W 119 03' 18"





ZALCO LABORATORIES, INC.

Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

May 7, 2015

Steve Filippi
Pentarch Petroleum
25938 Gardener
Loma Linda, CA 92354

TEL: (909) 440-9158
FAX: (909) 796-5121

Project ID:
RE: 1504168

Dear Steve Filippi:

Zalco Laboratories, Inc. received 1 samples on 4/15/2015 for the analyses presented in the following report.

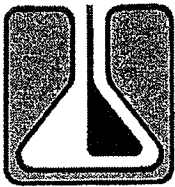
We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level * See Case Narrative
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.



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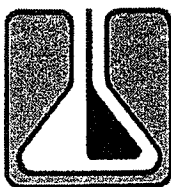
(661) 395-0539
FAX (661) 395-3069

Case Narrative

1504168-01 Per client water sold as agriculture water.

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTL: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic
Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Pentarch Petroleum
25938 Gardener
Loma Linda, CA 92354

Project: RWQCB Oilfield Ponds - 2Q2015
Project #:
Attention: Steve Filippi

Work Order No.: 1504168
Reported: 05/07/2015
Received: 04/15/2015 12:15

Lab Sample ID: 1504168-01

Collected By: Steve Filippi

Client Sample ID: Pentarch Lease Pond #1

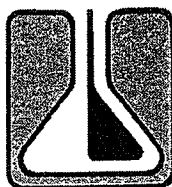
Date Collected: 4/15/2015 10:15:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity								
Total Alkalinity	180	10	mg/L		SM 2320B	4/15/15	4/15/15	SAM
Bicarbonate (HCO ₃)	180	10	mg/L		SM 2320B	4/15/15	4/15/15	SAM
Carbonate (CO ₃)	<10	10	mg/L		SM 2320B	4/15/15	4/15/15	SAM
Hydroxide (OH)	<10	10	mg/L		SM 2320B	4/15/15	4/15/15	SAM
CAM, Toxicity (17 Metals)								
<i>TTLC Limits</i>								
Antimony	<0.20	0.20	500	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Arsenic	<0.020	0.020	500	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Barium	<0.10	0.10	10000	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Beryllium	<0.010	0.010	75	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Cadmium	<0.010	0.010	100	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Chromium	<0.050	0.050	2500	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Cobalt	<0.10	0.10	8000	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Copper	<0.050	0.050	2500	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Lead	<0.050	0.050	1000	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Mercury	<0.0020	0.0020	20	mg/L	SW846 7470A	4/23/15	4/23/15	SS
Molybdenum	<0.10	0.10	3500	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Nickel	0.053	0.050	2000	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Selenium	<0.05	0.05	100	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Silver	<0.020	0.020	500	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Thallium	<0.50	0.50	700	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Vanadium	<0.10	0.10	2400	mg/L	SW846 6010B	4/17/15	4/21/15	SS
Zinc	<0.050	0.050	5000	mg/L	SW846 6010B	4/17/15	4/21/15	SS
General Chemistry								
<i>MCL Limits</i>								
Fluoride	0.51	0.20	2	mg/L	EPA 300.0	4/15/15	4/15/15	MSS
Nitrate as NO ₃	<2.00	2.00	45	mg/L	EPA 300.0	4/15/15	4/15/15	MSS
Electrical Conductivity	0.47	0.010		mmhos/cm	SM 2510B	4/17/15	4/17/15	SAM
Bromide	0.18	0.10		mg/L	EPA 300.0	4/15/15	4/15/15	MSS
Chloride	38	2.0		mg/L	EPA 300.0	4/15/15	4/15/15	MSS
pH	7.97			pH Units	EPA 150.1	4/15/15	4/15/15	SAM
Sulfate as SO ₄	8.4	0.50		mg/L	EPA 300.0	4/15/15	4/15/15	MSS
Total Dissolved Solids	300	10		mg/L	SM 2540C	4/17/15	4/17/15	SAM

Hardness

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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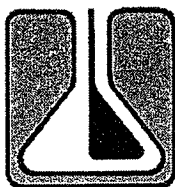
Pentarch Petroleum 25938 Gardener Loma Linda, CA 92354	Project: RWQCB Oilfield Ponds - 2Q2015 Project #: Attention: Steve Filippi	Work Order No.: 1504168 Reported: 05/07/2015 Received: 04/15/2015 12:15
--------------------------------------------------------------	----------------------------------------------------------------------------------	-------------------------------------------------------------------------------

Lab Sample ID: 1504168-01 Client Sample ID: Pentarch Lease Pond #1	Collected By: Steve Filippi Date Collected: 4/15/2015 10:15:00AM
-----------------------------------------------------------------------	---------------------------------------------------------------------

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness								
Hardness (as CaCO ₃)	16	2.0	mg/L		SM 2340B	4/21/15	4/21/15	SS
Metals								
Lithium	<0.10	0.10	mg/L		EPA 200.7	4/21/15	4/22/15	SS
Metals - As Received								
Magnesium	0.64	0.050	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Potassium	0.66	0.50	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Sodium	100	7.0	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Calcium	5.3	0.050	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Iron	<0.10	0.10	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Boron	0.49	0.10	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Barium	<0.10	0.10	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Copper	<0.050	0.050	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Silica (SiO ₂)	20	4.0	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Strontium	<0.10	0.10	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Manganese	<0.030	0.030	mg/L		EPA 200.7	4/21/15	4/21/15	SS
Oil & Grease Testing								
TRPH	15.0	5.00	mg/L		EPA 1664	4/29/15	4/29/15	BIG
Semivolatile Organic Compounds								
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Naphthalene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Acenaphthylene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Acenaphthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Fluorene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Phenanthrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Anthracene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Fluoranthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Pyrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (a) anthracene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Chrysene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM

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Lab Sample ID: 1504168-01 Client Sample ID: Pentarch Lease Pond #1	Collected By: Steve Filippi Date Collected: 4/15/2015 10:15:00AM
-----------------------------------------------------------------------	---------------------------------------------------------------------

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds								
Benzo (a) pyrene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L		SW846 8270C	4/17/15	4/20/15	JMM
Surrogates		% Recovery	Recovery Limits	Flag				

Nitrobenzene-d5	29.9	0-95				4/20/15 14:56
2-Fluorobiphenyl	34.3	0-92				4/20/15 14:56
Terphenyl-d14	142*	0-100	S-GC			4/20/15 14:56

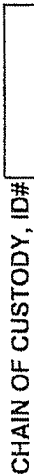
Volatile Organic Compounds

m,p-Xylene	<5.00	5.00	ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Benzene	<5.00	5.00	ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Xylenes, total	0.00		ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00	ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Ethylbenzene	<5.00	5.00	ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Toluene	<5.00	5.00	ug/L		SW846 8260B	4/21/15	4/21/15	HLP
o-Xylene	<5.00	5.00	ug/L		SW846 8260B	4/21/15	4/21/15	HLP
Surrogates		% Recovery	Recovery Limits	Flag				

1,2-Dichloroethane-d4	111	89-165				4/21/15 13:40
Toluene-d8	104	65-124				4/21/15 13:40
4-Bromofluorobenzene	98.7	94-114				4/21/15 13:40

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2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125

Client PO:
Project ID:
Quote ID:

ANALYSIS REQUESTED 1504168

Refiniquished By:	Company	Date	Time	Received By:	Company:
JJohnson	Zalco labs	04/15/15	12:15	<i>[Signature]</i>	Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

• Sample Type key:
Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas
LPG-Liquid Petroleum Gas; QL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water
WW-Wastewater